

Northeast Sands

Landscape Considerations for Planning and Management

This summary of the planning and management considerations for the Northeast Sands is substantially taken from the Northeast Sands chapter of the [Ecological Landscapes of Wisconsin book](#) (WDNR 2015).

The following information summarizes ecological and recreational considerations for planning and management in the Northeast Sands. This section provides a summary of the types of information the department uses to inform master planning decisions.

The master planning process takes both ecological and recreation considerations into account. The two may seem distinct, but they are closely connected: outdoor recreation opportunities on a property are shaped by the property's ecological characteristics. Thus, the ecological information presented here influences both resource management planning and recreation planning on DNR properties.

The NES EL has significant public land holdings which provide abundant recreation opportunities, particularly in settings that are remote or wild. Extensive forests provide diverse forest habitats, support local economies, and offer varied management opportunities. Restoration and landscape-scale management opportunities exist for globally imperiled pine barrens.

There is a shortage of older forest and of large patches. Many stands are composed of young or medium-aged trees dominated by one or a few species. Older, structurally complex, or floristically diverse stands are rare. A focus on early-successional aspen management has led to the creation of large amounts of edge habitats that have promoted generalist species at the expense of interior or area-sensitive species. Many areas of former pine barrens have succeeded to forest or been replaced by plantation pine. Opportunities exist to maintain large habitat patches, improve connectivity between smaller patches, and include areas of extended rotation or development of old-growth characteristics within working forests. There also are opportunities to increase the conifer component in different forest types, especially species like white pine, hemlock, red pine, and jack pine.

Early-successional management could be extended to include species like jack pine and scrub oak, much reduced from their historical abundance. Dry forest, barrens, and bracken grassland management could be coordinated (including across ownerships) to connect barrens remnants and increase effective habitat size. Prescribed fire is potentially an important management tool in many parts of the NES, to maintain and enhance dry forest and barrens communities.

As in other parts of the state, high white-tailed deer populations are exerting heavy browse pressure on seedlings and saplings of forest trees such as hemlock and white cedar as well as on shrubs and herbs, with negative impacts on forest composition and structure. A number of invasive species are established in the region, with others likely to appear in the near future. Aggressive species like European swamp thistle and glossy buckthorn threaten conifer swamps. Glossy buckthorn is widespread and locally common in the southern and eastern portions of the NES, particularly in disturbed white cedar swamps, and has the potential to completely overwhelm the understories of these wet-mesic forest communities. Emerald ash borer threatens the black ash component of hardwood swamps.

Forested river and stream corridors help to maintain high water quality of surface waters. Some of these offer good opportunity to connect small, scattered stands of older forest, especially coniferous forest, that support



species rare elsewhere in the EL. Hydrologic modifications include large dams on several of the major rivers. Installation of fish passage structures at hydroelectric dams would allow migratory fish to access spawning, wintering, and foraging habitats. Shoreline development along rivers and streams is a significant concern and is likely to increase in the future.

Recreationally, the NES is a destination for a variety of outdoor recreation activities taking place mostly in lightly-developed rural or remote settings. Hunting, fishing, paddling, wildlife viewing and a variety of both motorized and non-motorized trail activities are popular. The high proportion of public recreation land provides a variety of recreation facilities with a range of amenities, including campgrounds, trails, and boat launches. Some existing federal, state, and county ownerships are extensive and can accommodate a range of recreation activities, including those that are potentially incompatible.

Recreational needs and shortages have been identified for the region. Additional opportunity for trail-based activities – especially hiking and bicycling – camping, and more public access to rivers and lakes are high-ranked needs for the NES. There is potential to add or expand recreation activities on department properties in the NES to meet some of these shortages. Proper siting will be necessary in order to ensure a quality recreational experience for users that is compatible with property designations and physical capabilities. Road access, proximity to population centers, and trail connections to regional networks are important recreation factors to consider in planning for new or expanded uses. Ecologically, extensive wetlands in portions of the NES limit the variety of recreational activities that can be supported. Fragile vegetation and thin or erodible soils in other areas may limit trail-based pursuits. Some areas that are rugged in character and challenging to access may be more suited to activities that can be pursued in remote settings with few facilities.

